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(54) Title: CAMPHANYLIDENE AND PHENYLALKYL INOSITOL POLYPHOSPHATE COMPOUNDS, COMPOSITIONS, AND METHODS OF THEIR USE

(57) Abstract: This invention relates to new camphanylidene and phenyl alkyl inositol polyphosphate derivatives that inhibit the absorption of sodium ions in epithelial cells and regulate inducible nitric oxide synthase (iNOS) in macrophages. The invention provides methods for inhibiting sodium ion absorption by epithelial cells and/or regulating inducible nitric oxide synthase (iNOS) in macrophages, by treating epithelial cells or administering to a patient in need of such treatment a therapeutically effective amount of camphanylidene and/or phenyl alkyl inositol polyphosphate compound. Representative camphanylidene and phenyl alkyl inositol polyphosphate compounds include, for example, 1,2-camphanylidene-*myo*-inositol 3,4,5,6-tetrakisphosphate octakis (propionoxymethyl) ester (INO-4996), 2,3-camphanylidene-*myo*-inositol 1,4,5,6-tetrakisphosphate octakis (propionoxymethyl) ester (INO-4984) and 2-O-butyryl-1-O-(3-phenylpropyl)-*myo*-inositol 3,4,5,6-tetrakisphosphate octakis (propionoxymethyl) ester (INO-4997).